

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A process for the manufacture of isobutyric anhydride, comprising reacting acetic anhydride with isobutyric acid, and distilling the acetic acid generated as it is formed, wherein the reactor is initially loaded with ~~at least~~ a portion of one of acetic anhydride or isobutyric acid ~~the reagents and a portion of the other such that one reagent is~~ in an excess molar ratio relative to the stoichiometry of the other reactant ~~reagent~~, and the reaction is carried out while adding the remainder of the reactant not in excess ~~reagent~~ as the reaction progresses and according to space volume free in the reactor by the distillation of the acetic acid produced by the reaction, until a desired overall molar ratio of the reactants ~~reagents~~ is reached.

Claim 2 (Currently Amended): The process according to Claim 1, wherein the totality of one of the reactants ~~reagents~~ and a portion of the second are initially loaded.

Claim 3 (Previously Presented): The process according to Claim 1, wherein the overall isobutyric acid/acetic anhydride molar ratio is between 0.5 and 5.

Claim 4 (Previously Presented): The process according to Claim 3, wherein the desired molar ratio is an overall isobutyric acid/acetic anhydride molar ratio between 1.5 and 2.2.

Claim 5 (Previously Presented): The process according to Claim 1, having an initial isobutyric acid/acetic anhydride or acetic anhydride/isobutyric acid molar ratio between 0.2 and 1.

Claim 6 (Previously Presented): The process according to Claim 1, performed in a stirred reactor surmounted by a distillation column whose efficiency is at least 8 theoretical plates.

Claim 7 (Previously Presented): The process according to Claim 1, performed at a temperature of 70 to 150°C.

Claim 8 (Previously Presented): The process according to Claim 1, performed at a pressure of between 5.33×10^4 Pa (400 mmHg) and 0.67×10^4 Pa (50 mmHg).

Claim 9 (Previously Presented): The process according to Claim 1, wherein the temperature at the top of the column is adjusted according to pressure so as to correspond to the temperature for distillation of the acetic acid during the whole reaction.

Claim 10 (Previously Presented): The process according to Claim 1, further comprising purifying crude isobutyric anhydride by distilling excess acetic anhydride and residual mixed anhydride.

Claim 11 (Previously Presented) The process according to Claim 1, performed at a temperature of 100 to 120°C.